

In the Claims

1. A redundant fuel system for use in conjunction with a primary fuel system, the primary system including an air manifold coupled to engine cylinders and to a central plenum, the primary system providing separate fuel injectors for each cylinder during normal operation of the primary fuel system, the secondary system comprising:
 - 5 fuel input device for delivering fuel to said plenum; and
 - a control for preventing flow of fuel to said supply device during normal operation of said primary fuel system.
2. A fuel system, as claimed in claim 1, wherein said fuel input device comprises a fuel injector.
3. A fuel system, as claimed in claim 1, wherein said control comprises a solenoid.
4. Apparatus as claimed in claim 3 further comprising a flow rate control valve positioned between said solenoid and said supply device.
5. A fuel system, as claimed in claim 4, wherein said flow rate control comprises a barrel valve.
6. A fuel system, as claimed in claim 1, further comprising first and second separate pumps for providing pressurized fuel to said fuel input device.
7. Apparatus as claimed in claim 6 wherein said first and second pumps are series-connected.
8. A redundant fuel system for use in conjunction with a primary fuel system, the primary system including an air manifold coupled to engine cylinders and to a central plenum,

the primary system providing separate fuel injectors for each cylinder during normal operation of the primary fuel system, the secondary system comprising:

- 5 fuel input means for delivering fuel to said plenum; and
 a control means for preventing flow of fuel to said supply device during normal
operation of said primary fuel system.

9. A method for redundant fuel supply for an internal combustion engine,
comprising:

- providing a primary fuel system, the primary system including an air manifold coupled to
engine cylinders and to a central plenum, the primary system providing separate fuel injectors for
5 each cylinder during normal operation of the primary fuel system,
 providing a fuel input device for delivering fuel to said plenum;
 providing a control for preventing flow of fuel to said supply device during normal
operation of said primary fuel system;
 automatically configuring said control to an open position, to provide fuel to said fuel
10 input device, following failure of said primary fuel system.

10. An internal combustion fuel system comprising:
 a fuel bus for providing pressurized fuel to a plurality of fuel injections;
 a header tank for obtaining fuel for providing to said fuel bus;
 at least a first fuel tank coupled to said header tank for providing fuel to said header tank;
5 and
 a return line for returning fuel from said fuel bus to said header tank.

11. An internal combustion fuel system, as claimed in claim 8, wherein at least a
second fuel tank is coupled to said header tank for providing fuel to said header tank.

12. An internal combustion fuel system, as claimed in claim 8, wherein at least a first
pump provides flow from at least said first fuel tank to said header tank.

13. An internal combustion fuel system, as claimed in claim 10, further comprising at least a first flow meter for measuring rate of flow of fuel into said header tank from said pump.

14. A redundant internal combustion fuel system and apparatus substantially as described and depicted herein.